In re Patent Application of MICHAEL BLABER ET AL.
Serial No. 10/037,633
Filed: January 3, 2002

#### **REMARKS**

Applicants appreciate the Examiner's careful review of the application, and offer these remarks in support of the amendments above, and the patentability of the claims.

# The Examiner's Concerns Have Been Addressed

The abstract has been amended and the claim objections have been addressed according to the Examiner's suggestions. Regarding the rejections under Section 112, all have been addressed by the amendments set forth herein.

Claim 10 has been amended so that it is not a duplicate of claim 1, which is clearly broader in scope than claim 10. Along the same lines, amendment of claim 40 makes this claim broader than claim 42, addressing the Examiner's concern that these claims were duplicates of each other.

# The Claimed Invention Is Non-Obvious Over The Cited References

The declaration under 37 CFR 1.132 of coinventor Michael Blaber is submitted herewith. It is well established that an inventor is a person exceeding the ordinary level of skill in the art. Dr. Blaber's declaration points out that neither cited reference to Anderson et al. or to Mohsen et al. considers the problem addressed by the present invention. Anderson et al. teach that poor expression of the wild-type DKGR gene in E. coli is due to the tertiary structure caused in the mRNA by a palindromic sequence. The present invention has shown this view to be incorrect, and that poor expression of the DKGR gene in enteric bacteria such as E. coli is actually due to the G+C content of the gene. Thus, the Anderson et al. reference and its teachings would lead the person of ordinary skill in the art away from the present invention.

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Similarly, as pointed out by Dr. Blaber, the Mohsen et al. reference also teaches away from the present invention, or in the alternative is completely inapplicable in the present invention. In particular, the IVD gene studied by Mohsen et al. does not contain high G+C content throughout the gene, but concentrated in the 5' region. As noted by Dr. Blaber, the 5' region in this gene is a mitochondrial targeting domain which is unnecessary for synthesis of the enzymatic portion of the IVD protein. This teaching would lead the person of ordinary skill in the art to delete the 5' region, so as to obtain expression of the gene in E. coli. This is a completely different problem and approach to that addressed in the present invention. Accordingly, the Mohsen et al. reference would lead the skilled away from the claimed invention.

For those reasons, combining the Anderson et al. reference with the teachings of Mohsen et al. would neither produce the present invention, nor lead one skilled in the art to arrive at the present invention. Applicants, therefore, respectfully assert that obviousness rejection of the claims is defective, since the Office has not established a prima facie case of obviousness, as required. Thus, the Applicants suggest that the claims are patentable in view of the cited art and respectfully request that the claims be allowed.

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### Conclusion

In view of the amendments and the remarks presented herein, it is submitted that these claims are patentable. In addition, their respective dependent claims, which recite yet further distinguishing features, are also patentable and require no further discussion.

If the further prosecution can be facilitated through a telephone conference between the Examiner and the undersigned, the Examiner is respectfully requested to telephone the undersigned at his convenience.

RECEIVED

Respectfully submitted,

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